## **Amendment to the Claims:**

Please amend the claims to read as follows:

- 1. (currently amended) A composition of matter comprising a fluorescent product derived from a modified form of an Aequorea wild-type GFP polypeptide, wherein the amino acid sequence of said modified form of an Aequorea wild-type GFP polypeptide is at least 95% homologous to the amino acid sequence of SEQ ID NO:2, characterized in that and wherein, upon oxidation and cyclization of amino acid residues in the modified form corresponding to positions 65 to 67 of wild-type GFP polypeptide sequence [ (SEQ ID NO:2] ), a fluorescent product exhibiting a different excitation and/or emission spectrum from a corresponding product derived from of the wild-type GFP polypeptide sequence is formed.
- 2. (currently amended) A composition according to claim 1, wherein the <u>fluorescent</u> product exhibits an alteration in the ratio of two main excitation peaks relative to the corresponding product <u>derived from of wild-type GFP</u>.
- 3. (original) A composition according to claim 2, wherein increased fluorescence is exhibited at a shorter-wavelength peak of the two main excitation peaks.
- 4. (original) A composition according to claim 3, wherein the modified form of the wild-type GFP sequence comprises a replacement of Ser at a position corresponding to position 202 in the wild-type GFP sequence by Phe and a replacement of Thr at a position corresponding to position 203 by Ile.
- 5. (original) A composition according to claim 2, wherein increased fluorescence is exhibited at a longer-wavelength peak of the two main excitation peaks.
- 6. (original) A composition according to claim 5, wherein the modified form of the wild-type GFP sequence comprises a replacement of Ile at a position corresponding to position 167 of the wild-type GFP sequence by Val or Thr.

7. (original) A composition according to claim 5, wherein the modified form of the wild-type GFP sequence comprises a replacement of Ser at a position corresponding to position 65 of the wild-type GFP sequence by Thr, a replacement of Met at position 153 with Ala, and a replacement of Lys at position 238 with Glu.

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- 8. (currently amended) A composition according to claim 1, wherein the <u>fluorescent</u> product fluoresces at a shorter wavelength than the corresponding product derived from wild-type GFP.
- 9. (original) A composition according to claim 8, wherein the modified form of the wild-type GFP sequence comprises a replacement of Tyr at a position corresponding to position 66 of the wild-type GFP sequence by Phe, His or Trp.
- 10. (original) A composition according to claim 8, wherein the modified form of the wild-type GFP sequence comprises a replacement of Tyr at a position corresponding to position 66 of the wild-type GFP sequence by His and a replacement of Tyr at position 145 with Phe.
- 11. (original) A composition according to claim 8, wherein the modified form of the wild-type GFP sequence comprises a replacement of Tyr at a position corresponding to position 66 of the wild-type GFP sequence by Trp, a replacement of Asn at position 146 by Ile, a replacement of Met at position 153 by Thr, a replacement of Val at position 163 by Ala, and a replacement of Asn at position 212 by Lys.
- 12. (original) A composition according to claim 8, wherein the modified form of the wild-type GFP sequence-comprises a replacement of Tyr at a position corresponding to position 66 of the wild-type GFP sequence by Trp, a replacement of lle at position 123 by Val, a replacement of Tyr at position 145 by His, a replacement of His at position. 148 by Arg. a replacement of Met at position 153 by Thr, a replacement of Val at position 163 by Ala, and a replacement of Asn at position 212 by Lys.

- 13. (currently amended) A composition according to claim 1, wherein m the <u>fluorescent</u> product exhibits enhanced emission relative to the corresponding product <u>derived fro m of wild-type GFP.</u>
- 14. (original) A composition according to claim 13, wherein the modified form of the wild-type GFP sequence comprises a replacement of Ser at a position corresponding to position 65 of the wild-type GFP sequence by an amino acid selected from the group consisting of Ala, Cys, Thr, Leu, Val and Ile.
- 15. (original) A composition according to claim 14, wherein the amino acid is Cys or Thr.
  - 16-23. (canceled)